

AMENDMENTS TO THE CLAIMS

Please amend claims 9-16 as set forth below.

Claims 1-8 are CANCELED.

9. (CURRENTLY AMENDED) A method of producing an optical lens, comprising the steps of:

forming, on a substrate made of an optical material, a mask layer corresponding to a shape of an optical lens having a pattern whose width in a first direction is different from a width thereof in a second direction perpendicular to the first direction;

deforming the mask layer by heat treatment so that a surface area of the mask layer may be reduced; and

removing the mask layer and the substrate simultaneously to transfer the shape of the mask layer to the substrate to form the shape of the optical ~~lens~~lens;

forming a groove along a boundary between the substrate and a portion of the optical lens.

10. (CURRENTLY AMENDED) ~~A-~~The method of producing an optical lens according to claim 9, wherein the mask layer is formed by performing a light-exposure and development process for a photosensitive material film to pattern the photosensitive material film.

11. (CURRENTLY AMENDED) ~~A-~~The method of producing an optical lens according to claim 10, wherein, in the step of deforming the mask layer by heat treatment so that a surface area of the mask layer may be reduced, the heat treatment is performed at a temperature higher than a glass transition point of the photosensitive material film.

12. (CURRENTLY AMENDED) ~~A-~~The method of producing an optical lens according to claim 10, wherein, in the step of deforming the mask layer by heat treatment so that a surface area of the mask layer may be reduced, the heat treatment is performed at a temperature lower than a carbonization temperature of the photosensitive material film.

13. (CURRENTLY AMENDED) ~~A-~~The method of producing an optical lens according to claim 9, wherein, in the step of deforming the mask layer by heat treatment so that a

surface area of the mask layer may be reduced, the heat treatment is performed at a temperature higher than a room temperature.

14. (CURRENTLY AMENDED) ~~A~~The method of producing an optical lens according to claim 9, wherein, in the step of removing the mask layer and the substrate simultaneously, a dry etching process is performed using the mask layer as a mask to transfer the shape of the mask layer to the substrate to form the shape of the optical lens.

15. (CURRENTLY AMENDED) ~~A~~The method of producing an optical lens according to claim 14, wherein the dry etching process is performed in a condition that selection ratios for the substrate and the mask layer are substantially equal to each other.

16. (CURRENTLY AMENDED) A method of producing an optical lens array, comprising the steps of:

forming, on a substrate made of an optical material, a plurality of mask layer portions corresponding to shapes of a plurality of optical lenses each having a pattern whose width in a first direction is different from a width thereof in a second direction perpendicular to the first direction;

deforming the mask layer portions by heat treatment so that a surface area of each of the mask layer portions may be reduced; and

removing the mask layer portions and the substrate simultaneously to transfer the shapes of the mask layer portions to the substrate to form the shapes of the optical ~~lenses~~lenses;

forming a groove along a boundary between the substrate and a portion of each of the shaped optical lenses.